

**RECOVERY ACT  
ZORTMAN/LANDUSKY MINE  
REQUEST FOR NEW  
SLUDGE PUMP QUOTATIONS**

**REQUESTED BY:  
WILLIAM C. MAEHL, P.E.  
SPECTRUM ENGINEERING, INC.  
1413 4TH AVENUE NORTH  
BILLINGS, MONTANA 59101**

**REQUESTED ON BEHALF OF:  
MONTANA DEPARTMENT OF  
ENVIRONMENTAL QUALITY**

**DATED: APRIL 16TH, 2010**

**PUMP QUOTATIONS DUE DATE: APRIL 27TH, 2010**



# RECOVERY ACT - ZORTMAN/LANDUSKY MINE REQUEST FOR SLUDGE PUMP QUOTATIONS

The Montana Department of Environmental Quality (DEQ) jointly oversees reclamation of the Zortman and Landusky mines in co-operation with the USDI Bureau of Land Management (BLM) via a Memorandum of Understanding dated August 2, 2004. The BLM has secured funding for the Zortman/Landusky site through the American Recovery and Reinvestment Act of 2009. The economic stimulus money is being managed by the DEQ through their contract with Spectrum Engineering, Inc. in Billings, Montana. Spectrum Engineering is soliciting equipment quotations on behalf of the State of Montana for mine reclamation equipment for use at the Zortman/Landusky mine sites. The equipment is intended for use over an extended period to support leach pad water treatment associated with on-going water treatment operations.

Date Posted: April 16, 2010

Closing Date: April 27, 2010 at 2:00 PM MST

Award Basis: Best Value for the State of Montana DEQ

Bid Review: April 28-29, 2010

Award Date: April 30, 2010

Delivery Date: No Later Than June 30, 2010 or 60 days from Award Date

Delivery Location: Landusky Mine Site, Landusky, Montana

Engineering Mgr: Bill Maehl

Telephone: 406-259-2412 ext. 3

Email Address: [maehl@spectrum-eng.com](mailto:maehl@spectrum-eng.com)

Bids Sent To: Bill Maehl  
Spectrum Engineering  
1413 4th Avenue North  
Billings, MT 59101

Agency: Montana DEQ

Project Mgr: Wayne Jepson

Telephone: 406-444-0529

Payment Terms: Successful bidder shall supply written invoice sometime between May 1st and May 5th, 2010. Payment shall be made by Spectrum Engineering within 60 days of the date of invoice.

Title: Supplier will transfer title directly to the State of Montana, Department of Environmental Quality.

## REQUEST FOR PUMP QUOTATION

- Material Pumped:** The pumps will be handling leach pad water that starts at 3 pH coming out the pad and is adjusted to between 6.8 pH and 7 pH. The heavy metals then drop out with the precipitate being primarily aluminum. The heavy metals sludge laden water being pump will range from probably 5.5 pH to 7 pH. The metals sludge is typically 1 inch minus and easily goes into solution again within the 100' x 170' x 20' deep pH Adjustment Pond (1 million gallon capacity) every time the wind blows. It has the consistency of jello, is not typically gritty, and resembles a soft mud. If the sludge get too thick due to lack of water, we have added additional water to the mixture. The goal is to suck 100% of all sludges out of the pH Adjustment Pond and to the sludge disposal pit as quickly as possible to minimize Biological Treatment Plant down time.
- Pump Needs:** The requested quotation is for one (1) new trailer mounted centrifugal pump and one (1) new hydraulic submersible pump with trailer mounted power pack capable of feeding the centrifugal pump from 25 feet deep. Pumps must match the attached specifications (see drawings and specifications). The centrifugal pump need to be trailer mounted. The power pack for the submersible pump also needs to be trailer mounted. Pumps must be diesel driven and the electrical must have manual start. We envision the pumps to be at least a 6" x 6" or greater. The greater the gpm capable of being pumped, the better. This will be considered into the Best Value considerations for pump selection. Bidder is encouraged to quote more than one pump.
- Equip. Description:** In addition to providing the information requested on the attached submittal sheet, provide a thorough description of the specific machine offered including system curve, specification sheets, pump curves, and any other relevant information to assist in the pump evaluations. Pumps that offers additional value or utility will be considered in the Best Value evaluation.
- Offer must include calculations showing how the proposed pumps work with each other and how the centrifugal pump is capable of supplying a minimum of 500 gpm vertically uphill over a horizontal distance of 1480 feet and a vertical distance of 290 feet (static head). Your calculations should take into account the friction loss inside our 6-inch HDPE PE4710PR discharge pipe with a DR=13.5, 161 psi rating. The beginning pump elevation is 5100 feet and has a discharge elevation of 5390 feet. See the plan and profile sheet for the schematic.

## REQUEST FOR PUMP QUOTATION

- Warranty: The value of better warranties included in the quoted price will be considered in the evaluation of the Best Value offer.
- Quoted Price: The price quoted shall be for the pump(s) as specified in your submittal FOB Landusky Mine located about 165 miles north of Billings, Montana. You may quote up to three centrifugal pumps and three matching submersible pumps if you wish with a separate delivered price per each with their respective spec sheets attached to the bid. Please make note of which submersible goes with which centrifugal if you quote more than one pair.
- Evaluation: Spectrum Engineering reserves the right to select only the centrifugal pump and not the submersible pump or to choose two different vendors for the two separate pumps. Please bid according and do not anticipate cost savings on shipping. Should the centrifugal pump cost equal allowable funds, then the submersible pump will not be purchased at this time. You can show cost savings as a separate line item should the two units be purchased together.

# SPECTRUM ENGINEERING SLUDGE PUMPS BID SHEET

Sludge Pump Specifications		Pump #1	Pump #2	Pump #3
<u>Make</u>	Godwin Pumps Gorman-Rupp Rain For Rent Other Suitable Models			
<u>Model</u>	Must be Matched to Site Conditions. Please Quote Both a Centrifugal Pump and a Hydraulic Submersible Pump to Feed the Centrifugal Pump			
<u>Requirements</u>	Centrifugal Pump Must be Capable of Supplying 500 gpm Up a 290 Feet Vertical Static Head. Show Your Calculations That Your Proposed Pump Can Overcome the Static Head Plus the Friction in Our Pipe (See Attached Plan and Profile)			
Year Manufactured	2010 (new)			
<b>This Quote Must Include</b>				
Either Five (5) Sections of 6" x 10' Water Suction Hose with Quick Disconnect Fittings or One (1) Section of 6" or 8" x 50 Water Suction Hose				
One (1) 6" or 8" Small Hole Suction Screen with Male Quick Disconnect Fittings				
One (1) 6" or 8" x 20' Cargo Hose with 150# Flange Fittings				
One (1) 6" Female Quick Disconnect x 6" 150# Flange Adapter Mounted on Pump Suction (or 8-inch)				
One (1) 6" or 8" Quick Disconnect O-Ring (O-Ring is for Female Fitting on Suction)				
Pump Must be Self Priming and Dry Running				
Unit Must be Trailer Mounted				
<b><u>Diesel Engine</u></b>				
Make				
Model				
Net Horsepower	Minimum 300 HP with Power Measured at 1900 rpm to 2200 rpm			
Displacement	570 cu-in to 700 cu-in			
Fuel Tank Size	Expressed in Gallons			
Block Heater	Required			
Specification Sheet Attached	Must be Provided			
System Curve	Must be Provided and Must Prove the Proposed Pump is Capable of Handling the Assigned Task			
<b><u>Engine Warranty</u></b>				
<b><u>Pump Warranty</u></b>				
<b><u>Buy American Provision</u></b>				
% of Pump Assembled in USA				
% of Pump Parts Made in USA				
% of USA Steel Used in Pump Parts				
<b><u>Price F.O.B. Landusky Mine, MT</u></b>				



# RECOVERY - LANDUSKY BIOLOGICAL PLANT UPGRADE SLUDGE PUMP PLAN AND PROFILE

